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Louis P. Herzberg Intellectual Property Law Dept. IBM Corporation P.O. Box 218 Yorktown Heights, NY 10598			KRISHNAN, VIVEK V	
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/776,705

Applicant(s)

EILAM ET AL.

Examiner

Vivek Krishnan

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-21 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-21 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 11 February 2004 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. ____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. ____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date. ____ | 6) <input type="checkbox"/> Other: ____ |

DETAILED ACTION

This is a Non-Final Office Action Correspondence in response to U.S. Application No.

10/776705 filed on February 11, 2004. Claims 1- 21 are pending.

Drawings

1. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, claims 9 and 10 must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Claim 9 describes regenerating provisioning instructions when infrastructure characteristics, requirements of the service, or Provider's policy change. The feature of regenerating provisioning instructions based on these changes is not shown in the drawings.

Claim 10 inherits the deficiencies of claim 9 due to its dependence on claim 9.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an

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application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

2. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they include the following reference character(s) not mentioned in the description:

Service Environment Model (229), as shown in Fig. 2, is not mentioned in the description.

DPE (227), as shown in Fig. 2, is not mentioned in the description. Although the reference number it is associated with (227) *is* mentioned, 227 is associated with the Concrete Model Processing Engine (CMPE) in the description.

Provisioning Instructions (233), as shown in Fig. 2, is not mentioned in the description. Although the reference number it is associated with (233) *is* mentioned, 233 is associated with provisioning actions in the description.

Customer Domain (813), as shown in Fig. 5, is not mentioned in the description. Although the reference number it is associated with (813) *is* mentioned, 813 is associated with a service environment in the description.

Corrected drawing sheets in compliance with 37 CFR 1.121(d), or amendment to the specification to add the reference character(s) in the description in compliance with 37 CFR 1.121(b) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet

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submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

3. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(4) because reference character "813" shown in Fig. 5 has been used to designate both Customer Domain and Free Server.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Specification

4. Claims are objected to because of the following informalities:

The specification is objected to as failing to provide proper antecedent basis for the claimed subject matter. See 37 CFR 1.75(d)(1) and MPEP § 608.01(o). Correction of the following is required:

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“preconditions” as disclosed in claim 2. Neither the claims nor the specification provide sufficient disclosure for clearly defining preconditions.

“generating a Resource Manager” as disclosed in claim 11. Neither the claims nor the specification provide sufficient disclosure for how a Resource Manager is generated.

Appropriate correction is required.

Claim Objections

5. Claims 15, 16, and 18 are objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form.

6. Claims 2, 6, 7, 12, 14, and 19 are objected to because of the following informalities:

Claim 2 describes “said” knowledge subsystem. However, no knowledge subsystem is introduced in claim 2 or described in any previous claim that claim 2 depends on.

Claim 6 describes said side effects of “an” action. However, no side effects of “an” action is introduced in claim 6 or described in any previous claim that claim 6 depends on.

Although claim 4 describes side effects of the provisioning action, the side effects are associated with a particular provisioning action.

Claim 7 describes “the step of provisioning”. However no step of provisioning is introduced in claim 7 or described in any previous claim that claim 7 depends on.

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Claim 12 describes “said” Resource Manager. However, no Resource Manager is introduced in claim 12 or described in any previous claim that claim 12 depends on. Although claim 11 introduces a Resource Manager, claim 12 does not depend on claim 11.

Claim 14 describes “said” execution specification. However, no execution specification is introduced in claim 14 or described in any previous claim that claim 14 depends on. Although claim 13 introduces an execution specification, claim 14 does not depend on claim 13.

Claim 19 describes “the” Concrete Model Processing Engine. However, no Concrete Model Processing Engine is introduced in claim 19 or described in any previous claim that claim 19 depends on. Although a Concrete Model Processing Engine *phase* is introduced, this is not the same as a Concrete Model Processing Engine.

Appropriate correction is required.

7. Claims 6, 8, and 9 are objected to because of the following informalities:

Claims 6, 8, and 9 contain “at least one of” terminology that indicates an OR relationship between limitations. However applicant uses AND terminology. For example, in claim 8, ***changing a local state of a resource; and*** should be corrected to read ***changing a local state of a resource; or***. Claims 6 and 9 should be similarly corrected.

Appropriate correction is required.

Claim Rejections - 35 USC § 101

8. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

9. Claims 15 and 18 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. It is not clear from either the specification or the claims whether the “computer usable medium” is a transmission medium, storage medium, etc. The broadest reasonable interpretation of the claim term “computer usable medium” encompasses transmission medium and propagated signals. A transmission medium or a propagated signal is a form of energy. Energy is not one of the four categories of invention and therefore the claims are not statutory. Energy is not a series of steps or acts and thus is not a process. Energy is not a physical article or object and as such is not a machine or manufacture. Energy is not a combination of substances and therefore is not a composition of matter. Accordingly, the rejection of claims 15 and 18 as being non-statutory stands.

Claim Rejections - 35 USC § 102

10. Claims 1, 11, 15-18, 20, and 21 are rejected under 35 U.S.C. 102(e) as being anticipated by U.S. Patent No. 7,050,807 filed on June 12, 2000 by Osborn (denoted herein as “Osborn”).

11. As for claims 1 and 17, Osborn discloses ***a method (apparatus) for provisioning in a computing utility infrastructure, the method (apparatus) comprising:***

(means for) obtaining a Concrete Resource Model describing a desired resource structure

(Osborn discloses obtaining an abstract resource description describing virtual hardware resource objects which identify application hardware requirements, see column 3 lines 60-67); ***and***

(means for) using the Concrete Resource Model to generate at least one provisioning action to create a matching resource structure in the computing utility infrastructure (Osborn discloses using the abstract resource description to create a matching resource structure, by mapping available hardware resources to the abstract resource description, see column 3 lines 60-67.).

12. As for claim 11, Osborn discloses each and every limitation of claim 1. Osborn further discloses ***a method as recited in claim 1, further comprising employing said Concrete Resource Model to generate a Resource Manager for a composite resource*** (Osborn discloses that a hardware resource manager employs the application hardware resource specification and a hardware resource diagram, which represents a composite resource, see column 6 lines 3-20 and Figure 8, to allocate the composite resource and thereby create a resource manager for the composite resource, see column 7 lines 1-25).

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13. As for claim 15, Osborn discloses each and every limitation of claim 1. Osborn further discloses *an article of manufacture comprising a computer usable medium having computer readable program code means embodied therein for causing provisioning in a computing utility infrastructure, the computer readable program code means in said article of manufacture comprising computer readable program code means for causing a computer to effect the steps of claim 1* (Osborn discloses implementation on a hardware system comprising code to implement the provisioning, see column 3 lines 44-67, column 4 lines 1-15, column 7 lines 35-45, and Figure 2).

14. As for claim 16, Osborn discloses each and every limitation of claim 1. Osborn further discloses *a program storage device readable by machine, tangibly embodying a program of instructions executable by the machine to perform method steps for provisioning in a computing utility infrastructure, said method steps comprising the steps of claim 1* (Osborn discloses implementation on a hardware system comprising code to implement the provisioning, see column 3 lines 44-67, column 4 lines 1-15, column 7 lines 35-45, and Figure 2).

15. As for claim 18, Osborn discloses each and every limitation of claim 17. Osborn further discloses *a computer program product comprising a computer usable medium having computer readable program code means embodied therein for causing provisioning in a computing utility infrastructure, the computer readable program code means in said computer program product comprising computer readable program code means for causing a computer to effect the functions of claim 17* (Osborn discloses implementation on a hardware system

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comprising code to implement the provisioning, see column 3 lines 44-67, column 4 lines 1-15, column 7 lines 35-45, and Figure 2).

16. As for claim 20, Osborn discloses each and every limitation of claim 1. Osborn further discloses *wherein the steps of obtaining and using are performed by at least one user taken*

from a group of users consisting of:

a service provider;

an enterprise owning an infrastructure used for running at least one application (Osborn discloses an application developer, see column 3 lines 1-15 and column 8 lines 12-23);

a customer of a service provider;

a company owning an IT infrastructure (Osborn discloses an application developer, see column 3 lines 1-15 and column 8 lines 12-23); *and*

a utility provider (Osborn discloses an application developer, see column 3 lines 1-15 and column 8 lines 12-23).

17. As for claim 21, Osborn discloses each and every limitation of claim 20. Osborn further discloses *wherein at least one of said at least one user provides operational constraints*

dictating acceptable variations (Osborn discloses the application specification, provided by the application developer, that provides operational constraints, see column 3 lines 1-15 and lines 60-67).

Claim Rejections - 35 USC § 103

18. Claims 2, 3, 7, 8, and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Osborn, as applied to claim 1 above, and in further view of U.S. Patent No. 6,332,023 B1 issued on December 18, 2001 to Porter et al. (denoted herein as "Porter").

19. As for claim 2, Osborn discloses each and every limitation of claim 1. Osborn further discloses *wherein the step of using the Concrete Resource Model includes executing at least one phase comprised of a matching step, wherein the step of matching is repeated until the Concrete Resource Model is entirely matched with a set of at least one Resource Instance Service in said knowledge subsystem* (Osborn discloses that using the abstract resource description, or application hardware resource specification, includes matching the application hardware resource specification with the hardware resource diagram, see column 6 lines 65-67 and column 7 lines 1-25 and Figure 8).

Osborn does not explicitly disclose, but Porter discloses *a configuring step* as recited in the claim (see column 3 lines 30-40 of Porter).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Osborn's disclosure of a matching step to include a configuring step in order to provide for a more flexible allocation of resources, see column 2 lines 35-54 of Porter).

20. As for claim 3, Osborn and Porter in combination disclose each and every limitation of claim 2. Osborn further discloses *wherein the step of matching includes mapping every node in a subset of nodes in the Concrete Resource Model to a Resource Instance Service in the knowledge subsystem, such that for every node in said subset, constraints on values of fixed*

attributes in said node are satisfied by the values of the same attributes in the corresponding Resource Instance Service, and the set of fixed relationships between matched nodes matches the set of relationships between the corresponding Resource Instance Services (Osborn discloses matching the application hardware resource specification, see Figure 9, to the hardware resource diagram, see Figure 8, by parsing the definitions and constraints of the application hardware resource specification, see column 6 lines 65-67 and column 7 lines 1-25, that include information regarding fixed attributes and relationships, see column 6 lines 45-65).

21. As for claim 7, Osborn discloses each and every limitation of claim 1. In addition, Osborn and Porter in combination disclose *wherein the step of provisioning includes at least one task taken from a group of tasks consisting of:*

creating a new service environment (Osborn discloses allocating resources to an application to create a service environment, see column 3 lines 60-67);

changing a combination of resources allocated to the service environment (Osborn discloses allocating resources to an application to create a service environment, see column 3 lines 60-67.

In addition, Porter discloses de-allocating resources allocated to a service environment, see column 3 lines 40-50);

changing the configuration of resources allocated to a service environment (Porter discloses changing the configuring of a resource that has been allocated to a service environment, see column 3 lines 30-40);

destroying a service environment; and

any combination of these tasks.

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It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Osborn's disclosure of provisioning to include the ability to change the configuration of resources in order to provide for a more flexible allocation of resources, see column 2 lines 35-54 of Porter.

22. As for claim 8, Osborn and Porter in combination disclose each and every limitation of claim 7. Porter further discloses *wherein changing the configuration of resources allocated to a service environment includes at least one of:*

changing a local state of a resource (Porter discloses updating static and dynamic resource attributes, see column 1 lines 66-67, column 3 lines 1-20); *and*
changing a way the resource is configured to work with other resources.

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Osborn's disclosure of provisioning to include the ability to change the configuration of resources in order to provide for a more flexible allocation of resources, see column 2 lines 35-54 of Porter.

23. As for claim 19, Osborn and Porter in combination disclose each and every limitation of claim 2, Osborn further discloses *wherein said at least one phase is a Concrete Model*

Processing Engine phase, the Concrete Model Processing Engine:

receiving requests in the form of a Concrete Resource Model describing a desired resource structure (Osborn discloses a hardware resource manager that receives requests in the form of an abstract resource description describing virtual hardware resource objects which identify application hardware requirements, see column 3 lines 60-67); *and*

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generating provisioning actions for reaching a state that satisfies the requirements specified in the Concrete Resource Model (Osborn discloses the hardware resource manager creating a matching resource structure to satisfy the requirements of the abstract resource description, see column 3 lines 60-67).

24. Claims 4 and 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Osborn and Porter, as applied to claim 2 above, and in further view of U.S. Patent No. 4,980,824 issued on December 25, 1990 to Tulpule et al. (denoted herein as "Tulpule"), and U.S. Patent No. 4,648,031 issued on March 3, 1987 to Jenner (denoted herein as "Jenner").

25. As for claim 4, Osborn and Porter in combination disclose each and every limitation of claim 2. Neither Osborn nor Porter explicitly disclose, but Tulpule discloses *wherein the step of configuring includes:*

collecting provisioning actions to a provisioning action set (Tulpule discloses collecting tasks to a queue, see column 2 lines 55-65);

selecting a provisioning action having all preconditions satisfied (Tulpule discloses selecting tasks having all prerequisites met, see column 2 lines 55-65 and column 3 lines 24-26);

executing the provisioning action (Tulpule discloses executing the tasks, see column 3 lines 24-26.); *and*

repeating the steps of selecting and executing until all provisioning actions whose preconditions are satisfied are executed (Tulpule discloses selecting tasks whose prerequisites are satisfied for placement in a queue for execution, see column 3 lines 24-26).

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It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Osborn and Porter's disclosure of a configuring step to include collecting, selecting, and executing tasks for provisioning in order to provide a task executive that takes into account task dependencies and prerequisites (see column 2 lines 23-34 of Tulpule).

Tulpule does not explicitly disclose, but Jenner discloses *and updating the knowledge subsystem with side effects of the provisioning action* (Jenner discloses a recovery log that is updated with side effect information of a task, see column 2 lines 4-10).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Tulpule's disclosure of executing the task to include updating the system with the side effects of the task in order to facilitate system recovery (see column 1 lines 55-65 of Jenner).

26. As for claim 6, Osborn, Porter, Tulpule, and Jenner in combination disclose each and every limitation of claim 4. Jenner further discloses *obtaining said side effects of an action by at least one of:*

inspecting the definition of said provisioning action in said knowledge subsystem; and dynamically discovering the side effects once the action is executed by executing a discovery component (Jenner discloses a recovery log that is updated with side effect information when a task is executed, see column 2 lines 4-10).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Tulpule's disclosure of executing the task to include updating the system with the side effects of the task in order to facilitate system recovery (see column 1 lines 55-65 of Jenner).

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27. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Osborn and Porter, as applied to claim 2 above, in further view of Tulpule.

28. As for claim 5, Osborn and Porter in combination disclose each and every limitation of claim 2. Neither Osborn nor Porter explicitly disclose, but Tulpule discloses, *wherein the step of configuring includes selecting a provisioning action from a provisioning action set having at least one precondition not satisfied* (Tulpule discloses dependency table, see Figure 4, and prerequisite table, see Figure 5, that are used to determine tasks with preconditions satisfied and tasks without preconditions satisfied, see column 12 lines 29-47), *finding a different action to satisfy said at least one precondition* (Tulpule discloses selecting a different task that satisfies the prerequisite, see column 12 lines 29-47); *and adding said different action to said provisioning action set* (Tulpule discloses selecting a different task that satisfies the prerequisite and placing the task in a queue for execution, see column 12 lines 29-47).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Osborn and Porter's disclosure of a configuring step to include providing a task to satisfy the preconditions of another task in a set in order to provide a task executive that takes into account task dependencies and prerequisites (see column 2 lines 23-34 of Tulpule).

29. Claims 9 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Osborn, as applied to claim 1 above, and in further view of U.S. Patent Application Publication No. US

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2004/0128397 A1 filed on September 10, 2003 by Glasmann et al. (denoted herein as "Glasmann").

30. As for claim 9, Osborn discloses each and every limitation of claim 1. Osborn does not explicitly disclose, but Glasmann discloses *regenerating provisioning instructions whenever at*

least one of the following occurs:

infrastructure characteristics change (Glasmann discloses allocating resources when there is a change in the topology, see page 1 paragraph 5, 8, and 9); *and*

requirements of the service change; and

Provider's policy change.

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Osborn's disclosure of provisioning resources to include providing resources when infrastructure characteristics change in order to provide for adaptive resource checking and reacting to topology changes (see page 1 paragraphs 7 and 10 of Glasmann).

31. As for claim 10, Osborn and Glasmann in combination disclose each and every limitation of claim 9. Glasmann further discloses *wherein infrastructure characteristics are taken from a*

group of characteristics consisting of:

types of resources in the infrastructure;

capabilities of said resources (Glasmann discloses topology changes include changes in the capabilities of a resource, see page 1 paragraphs 4 and 5);

configuration of said resources (Glasmann discloses topology changes include changes in the configuration of a resource, see page 1 paragraphs 4 and 5);

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***constraints on a configuration of said resources; and
any combination of these characteristics.***

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Osborn's disclosure of provisioning resources to include providing resources when infrastructure characteristics change in order to provide for adaptive resource checking and reacting to topology changes (see page 1 paragraphs 7 and 10 of Glasmann).

32. Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over Osborn, as applied to claim 1 above, and in further view of U.S. Patent No. 6,901,446 B2 filed on February 28, 2001 by Chellis et al. (denoted herein as "Chellis").

33. As for claim 12, Osborn discloses each and every limitation of claim 1. Osborn does not explicitly disclose, but Chellis discloses ***wherein said Resource Manager provides a set of resource manager methods taken from a group of resource manager methods consisting of: creating composite resources based on a Concrete Resource Model*** (As mentioned above, Osborn *does* disclose a resource manager for a composite resource. However, Osborn does not explicitly disclose, but Chellis discloses a resource manager capable of creating a composite resource, or set of interdependent resources, based on defined resource requirements for a service, see column 3 lines 36-59);

changing composite resources based on a Concrete Resource Model (As mentioned above, Osborn *does* disclose a resource manager for a composite resource. However, Osborn does not explicitly disclose, but Chellis discloses a resource manager capable of changing a composite

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resource, or set of interdependent resources, based on defined resource requirements for a service, see column 3 lines 36-67 column 4 lines 1-27 and column 9 lines 55-67);

***destroying composite resources based on a Concrete Resource Model; and
any combination of these resource manager methods.***

It would have been obvious to one of ordinary skill in the art at the time of the invention to include in Osborn's disclosure of a resource manager the ability to create and change composite resources in order to provide increased functionality to the resource manager and, in addition, to provide for more robust allocation of composite resources (see column 2 lines 44-67 and column 3 lines 1-6).

34. Claims 13 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Osborn, as applied to claim 1 above, and in further view of U.S. Patent No. 5,151,984 issued on September 29, 1992 to Newman et al. (denoted herein as "Newman").

35. As for claim 13, Osborn discloses each and every limitation of claim 1. Osborn does not explicitly disclose, but Newman discloses ***wherein the step of using is executed according to an execution specification*** (Newman discloses a specification for execution, see column 53 lines 6-10).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Osborn's disclosure of the step of using to include executing according to an execution specification in order to control how the step of using is executed.

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36. As for claim 14, Osborn discloses each and every limitation of claim 1. Osborn does not explicitly disclose, but Newman discloses *wherein said execution specification is taken from a group of execution specifications consisting of:*
execute immediately (Newman discloses executing code immediately, see column 53 lines 6-10);
stored and executed later at least once (Newman discloses storing and executing later, see column 53 lines 6-10); *and*
a combination of the above.

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Osborn's disclosure of the step of using to include executing according to an execution specification in order to control how the step of using is executed.

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Conclusion

37. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

U.S. Patent No. 6,786,901 B1 issued to Osborn et al.


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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Vivek Krishnan whose telephone number is (571) 270-5009. The examiner can normally be reached on Monday through Friday from 7:30 AM to 5:00 PM EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Taghi Arani can be reached on (571) 272-3787. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

VK


TAGHI ARANI
PRIMARY EXAMINER
9/12/10